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~~Exhibit 106-754723~~

4-90

GENERAL OUTLOOK

SUMMARY

APRIL 1, 1990

BELOW NORMAL SNOWFALL DURING MARCH HAS KILLED ANY HOPES OF HAVING NEAR NORMAL RUNOFF CONDITIONS IN CENTRAL AND SOUTHERN IDAHO. STREAMFLOW FORECASTS ARE WELL BELOW NORMAL ACROSS MUCH OF CENTRAL AND SOUTHERN IDAHO, SLIGHTLY BELOW NORMAL IN EASTERN IDAHO AND THE UPPER SNAKE BASIN, AND NEAR NORMAL IN NORTHERN IDAHO. EARLY SNOWMELT DURING LATE MARCH AND EARLY APRIL COULD COMPOUND THE PROBLEM, CAUSING STREAMS TO RECEDE TO LOW FLOW CONDITIONS MUCH EARLIER THAN NORMAL. WATER USERS IN CENTRAL AND SOUTHERN IDAHO SHOULD KEEP IN TOUCH WITH THEIR LOCAL IRRIGATION DISTRICTS FOR MORE SPECIFIC INFORMATION.

SNOWPACK

Snowfall was disappointing across the entire state of Idaho during March, with most basins receiving only 50-75% of normal amounts. Adding to the problem, snowmelt began 2-3 weeks earlier than usual, causing a net loss at some snow courses during the month. Northern Idaho continues to report the best snowpacks in the state, ranging from 70 to 116% of normal. Snowpacks are considerably lower elsewhere, ranging from 8 to 77% in central and southern Idaho, and 58 to 87% in eastern Idaho and the upper Snake River basin in Wyoming. SNOTEL reported daily snowmelt rates of around one-half inch of water equivalent during late March. With these melt rates, snowpacks will not last very long in southern and central Idaho, and streams will recede to low flow conditions several weeks earlier than normal.

PRECIPITATION

Idaho's SNOTEL system reported below normal mountain precipitation during March, with most sites receiving only 50-75% of average. March is typically the last month of significant snow accumulation in the mountains. The National Weather Service reported below normal precipitation at valley stations for the fifth month in a row. Though the state overall averaged below normal precipitation, several stations reported above normal amounts. Lewiston reported 105% of normal, and Twin Falls received 128%. In the parched southeast corner of the state, Grace received a welcome 150% of normal, and Pocatello reported 2.28 inches of precipitation for 243% of normal. Monthly temperatures for Idaho's valleys were uncommonly warm and averaged 3.5 degrees above normal. The low precipitation and warm temperatures have allowed many farmers to begin spring planting activities several weeks earlier than normal.

RESERVOIRS

Rising streamflows in late March signaled the beginning of the runoff season, and reservoir operators in central and southern Idaho are storing as much water as possible. Most reservoirs in the state report an increase in storage over last month. Northern Idaho, the Payette basin, and Snake mainstem reservoirs report near or above normal storage for this time of year. Elsewhere, conditions are below normal. The lowest storages in the state include Montpelier Creek Reservoir (15% of capacity), Salmon Falls Reservoir (20%), Oakley Reservoir (23%), and Magic Reservoir (27%). Irrigators in these basins should plan for possible severe water shortages this summer. Elsewhere, conditions are somewhat better, with the upper Snake reporting 83% of capacity and the Boise system 54% full. All irrigators should keep in touch with their local irrigation districts for more specific information.

STREAMFLOW

Streamflow volumes increased during March, reflecting the beginning of snowmelt, but were still below normal across most of the state. The Boise River reported only 68% of normal flow for the month; the Salmon at Whitebird produced 73%. Volumes were near normal in the upper Snake basin and northern Idaho, where snowpack conditions are closer to average. Streamflow forecasts for the coming spring and summer reflect the current snowpack situation. Outlooks for northern Idaho range from 80 to 110% of average, central and southern Idaho streams are expected to produce only 30 to 60% of normal volumes, and eastern Idaho and the upper Snake River look somewhat better with forecasts in the 60 to 80% of normal range. If the warm temperatures of early April continue, streamflow peaks will be several weeks earlier than normal, especially in central and southern Idaho, where snowpacks are minimal. Water shortages are likely in many areas of Idaho, including the Wood, Lost, Mud Lake, Salmon Falls, Oakley, Raft, and Great Basin areas. All water users should keep in touch with their local irrigation districts for more specific information.

RECREATIONAL OUTLOOK

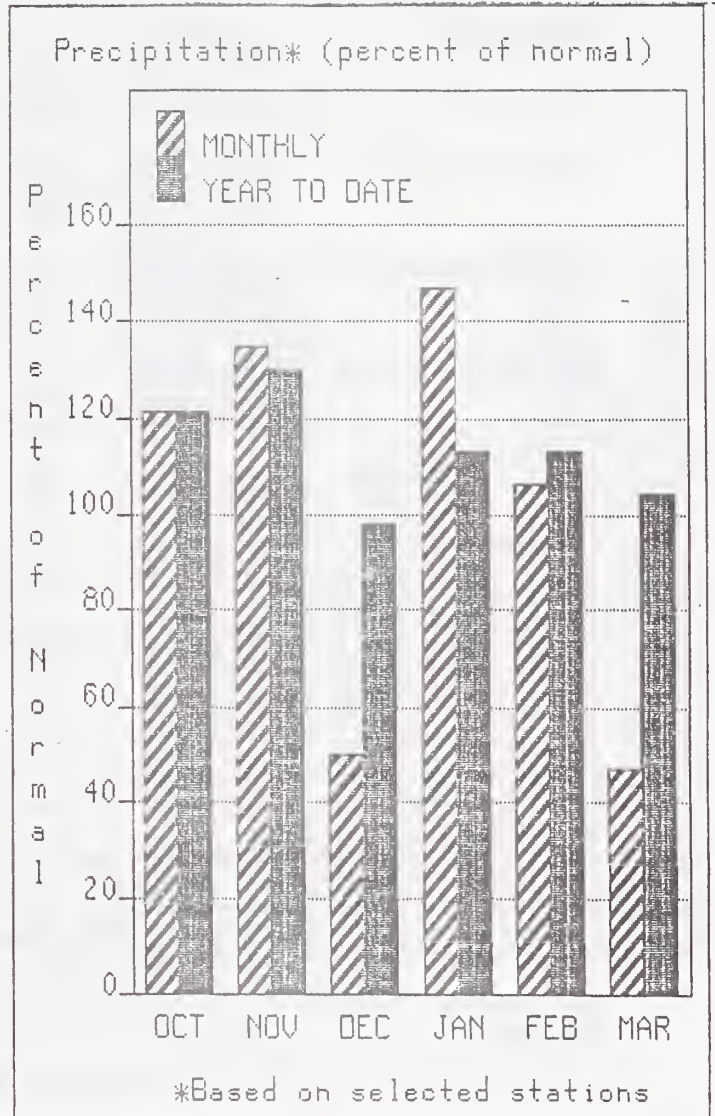
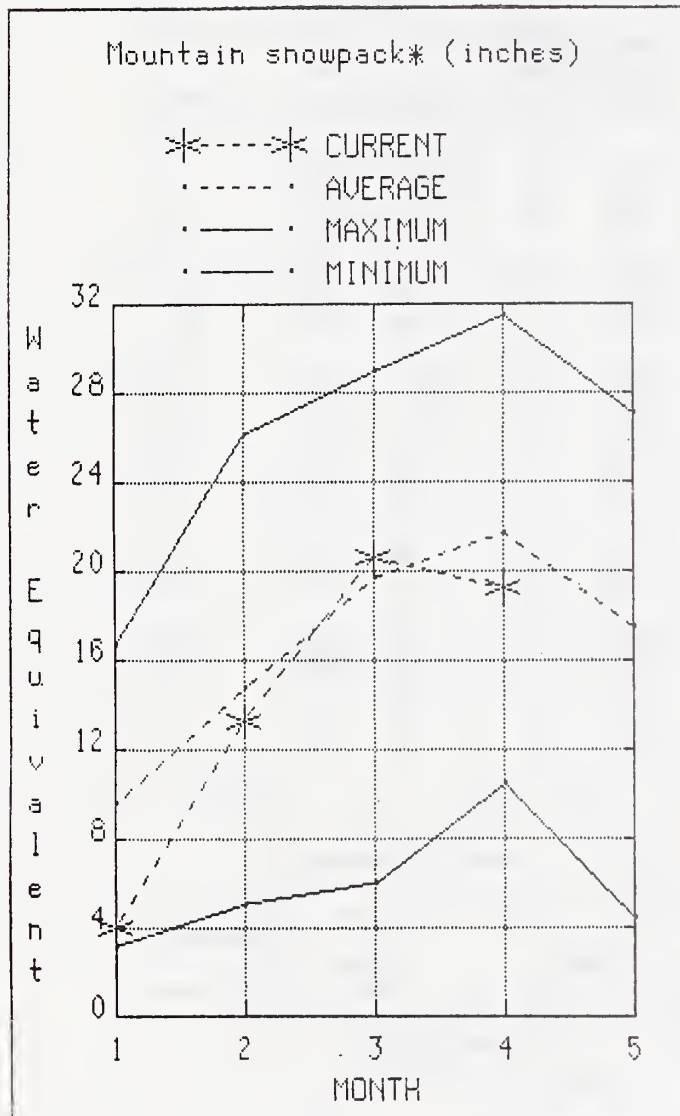
Warm temperatures, melting snowpack, and rising streamflows should have whitewater enthusiasts enjoying Idaho's rivers several weeks earlier than normal this year. Northern Idaho rivers like the Moyie, St. Joe, Lochsa and Selway promise the biggest water due to the near normal snowpack. In contrast, the southwest desert rivers (Owyhee and Bruneau) may not provide enough water for crafts larger than canoes or kayaks. Central mountain rivers should peak several weeks earlier than normal, providing earlier access, warmer water, and better fishing.

OTHER INFORMATION

The Soil Conservation Service is currently reviewing its snowpack data collection network to increase program efficiency and improve streamflow forecast accuracy. Emphasis is being placed on maximum utilization of the automated SNOTEL system, which has proven its accuracy and reliability in over 10 years of operation. All streamflow forecast procedures are being analyzed using recently developed statistical methods to determine which data combinations result in the best forecasts. Streamflow forecasting procedures using SNOTEL data are as accurate as, and sometimes more accurate than, procedures using manual snow course measurements. Our analysis indicates that some manual snow courses are unnecessary because they are not needed in forecast equations, or they are providing redundant information when compared to nearby SNOTEL sites or other snow courses in the basin. This summer, you will be provided with background information on our network review and a list of snow course candidates for elimination. No snow course will be eliminated if it compromises our ability to produce accurate water supply forecasts. Your comments will be requested concerning any snow courses that have special uses outside of our water supply forecasting program. The resources saved through elimination of unnecessary snow courses will be used to expand the existing SNOTEL network during the 1990's.

Upper Columbia Basin

APRIL 1, 1990



WATER SUPPLY OUTLOOK

Mountain precipitation for March, reported by the SNOTEL system, was well below normal at only 53% of average. Water year to date (Oct-Mar) precipitation figures are still well above normal, due to the extremely heavy precipitation received in previous months. Snowpacks in the Upper Columbia basin range from 70 to 116% of average, with the basin as a whole reporting 89% of average. This is a decrease from last month's snowpack of 105% of average. With near normal storage in five key reservoirs and near normal runoff conditions expected, water supplies should be adequate this season to meet most user needs.

UPPER COLUMBIA RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	FUTURE CONDITIONS						
		<----- DRIER -----		----- WETTER ----->				
		90% (1000AF)	70% (1000AF)	50% (MOST PROBABLE) (1000AF) (% AVG.)	30% (1000AF)	10% (1000AF)	25 YR. (1000AF)	
KOOTENAI at Leona (1,2)	APR-SEP	7600	8520	9160 109	9800	10700	8441	
	APR-JUL	6610	7410	7970 109	8530	9320	7340	
	APR-JUN	5310	5980	6430 109	6880	7490	5899	
CLARK FORK at Whitehorse Rps (1,2)	APR-SEP	9890	11400	12500 93	13600	15100	13370	
	APR-JUL	8990	10400	11400 94	12400	13700	12150	
	APR-JUN	7670	8800	9630 93	10500	11700	10360	
PEND OREILLE LAKE inflow (1,2)	APR-SEP	11000	12700	13900 93	15100	16900	14930	
	APR-JUL	10100	11600	12700 93	13800	15400	13650	
	APR-JUN	8720	10100	11000 93	11900	13300	11780	
PRIEST nr Priest River (1,2)	APR-SEP	605	740	830 93	920	1050	893	
	APR-JUL	570	695	780 93	865	990	838	
COEUR D'ALENE at Enaville (1)	APR-SEP	580	715	780 94	845	965	830	
	APR-JUL	550	680	740 94	800	915	789	
ST. JOE at Calder	APR-SEP	965	1120	1220 95	1320	1490	1281	
	APR-JUL	910	1050	1150 95	1250	1390	1211	
SPOKANE nr Post Falls (1,2)	APR-SEP	2000	2460	2730 97	3000	3440	2820	
	APR-JUL	1930	2380	2640 97	2900	3320	2723	

RESERVOIR STORAGE (1000AF)					WATERSHED SNOWPACK ANALYSIS		
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **			WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR. AVERAGE
		THIS YEAR	LAST YEAR	AVG.			
HUNGRY HORSE	3451.0	2168.0	1128.0	2098.0	Kootenai ab Bonners Ferry	53	110 103
FLATHEAD LAKE	1791.0	802.9	675.0	753.0	Moyie River	3	102 99
PEND OREILLE	1561.2	605.8	562.1	813.7	Pend Oreille River	139	94 92
NOXON RAPIDS	335.0	318.9	304.3	213.6	Clark Fork River	101	90 86
COEUR D'ALENE	291.2	212.8	243.2	234.3	Priest River	7	95 89
PRIEST LAKE	97.7	71.6	46.8	39.8	Rathdrum Creek	1	79 91
					Hayden Lake	3	72 116
					Coeur d'Alene River	9	99 95
					St. Joe River	10	98 91
					Spokane River	22	96 94
					Palouse River	3	42 70

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table.

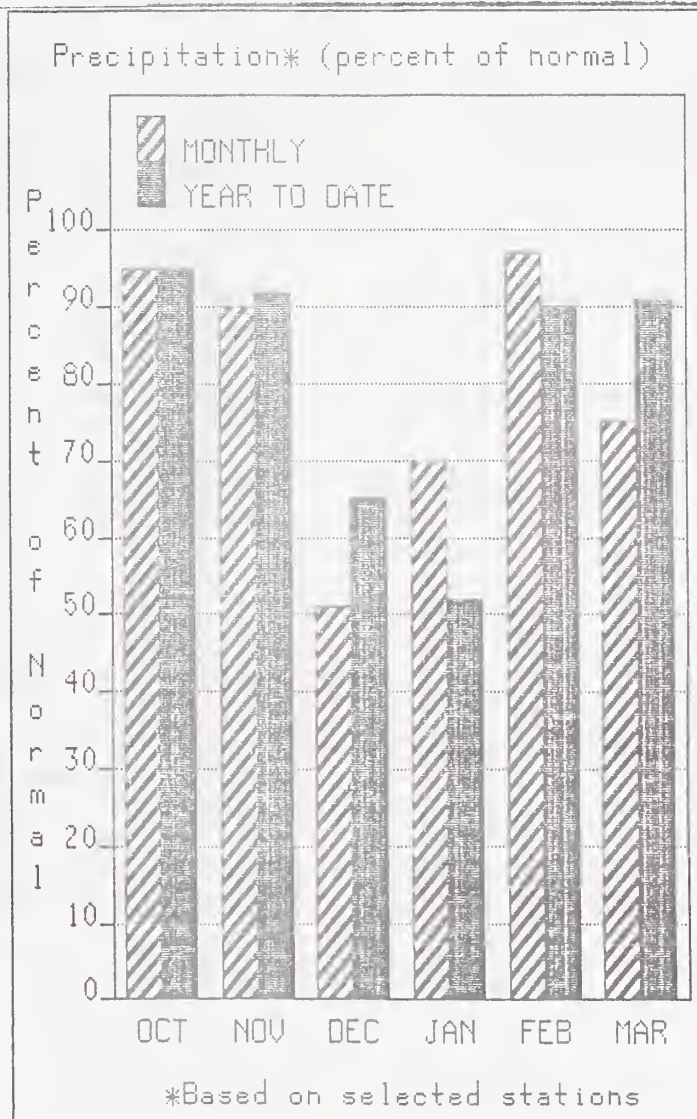
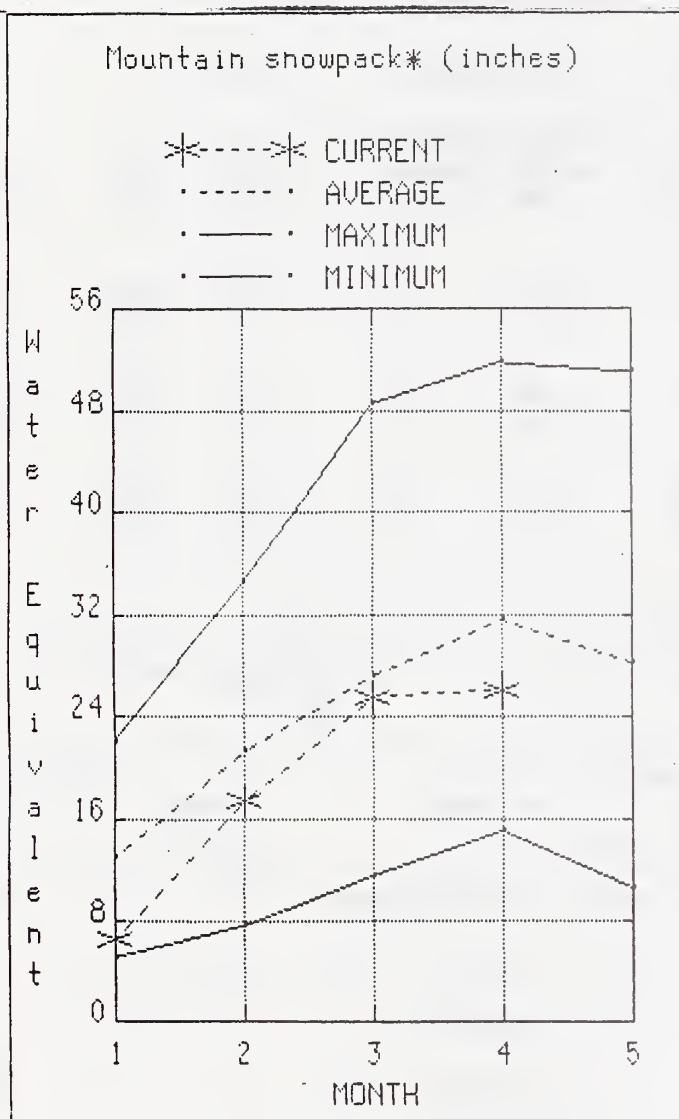
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(2) - The value is natural flow - actual flow may be affected by upstream water management.

Clearwater River Basin

APRIL 1, 1990



WATER SUPPLY OUTLOOK

Below normal precipitation during March has reduced the basin snowpack from the 97% figure reported last month to 86% as of April 1. Warm temperatures during late March and early April have started the snowmelt season a few weeks earlier than normal, and if the trend continues, most streams should peak earlier than normal. Whitewater boaters should prepare for a slightly earlier than normal runoff season on the Lochsa and Selway Rivers. Dworshak Reservoir reports above normal storage for this time of year at 120% of average and 69% of capacity. Streamflow projections remain optimistic, with the Clearwater at Orofino expected to produce 80% of normal flow. These figures indicate an adequate water supply to meet most user needs this year.

CLEARWATER RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	<div style="display: flex; justify-content: space-between; align-items: center;"> <----- DRIER ----- FUTURE CONDITIONS ----- WETTER -----> </div>							
		CHANCE OF EXCEEDING *							
		90%	70%	50% (MOST PROBABLE)		30%	10%		25 YR.
		(1000AF)	(1000AF)	(1000AF) (% AVG.)		(1000AF)	(1000AF)		(1000AF)
DWORSHAK RESERVOIR inflow (1)	APR-SEP	1750	2130	2400	80	2670	3070		3010
	APR-JUL	1640	2000	2250	80	2500	2880		2822
CLEARWATER at Orofino (1)	APR-SEP	2790	3610	4150	80	4690	5470		5163
	APR-JUL	2640	3420	3930	80	4440	5180		4889
CLEARWATER at Spalding (1,2)	APR-SEP	4690	5830	6590	79	7350	8460		8378
	APR-JUL	4430	5520	6230	79	6950	8000		7916

RESERVOIR STORAGE (1000AF)					WATERSHED SNOWPACK ANALYSIS			
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **			WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF	
		THIS YEAR	LAST YEAR	AVG.			LAST YR.	AVERAGE
DWORSHAK	3467.8	2400.8	1990.3	1996.2	North Fork Clearwater	15	92	86
					Lochsa River	6	80	82
					Selway River	8	80	82
					Clearwater River	25	87	86

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table.

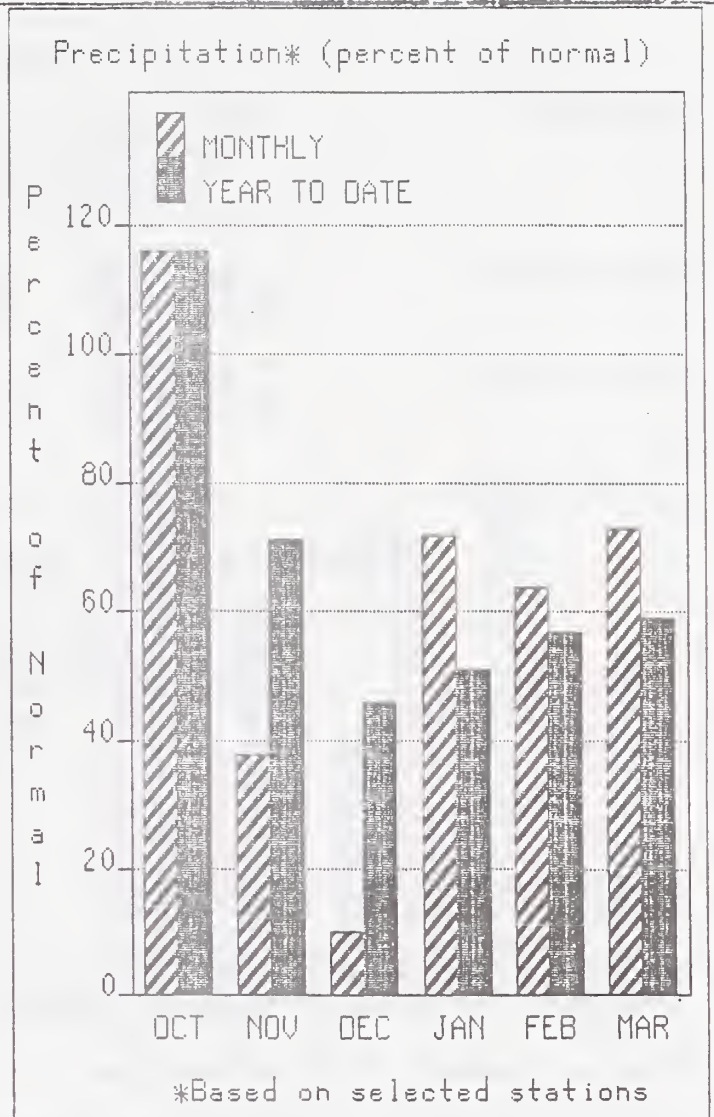
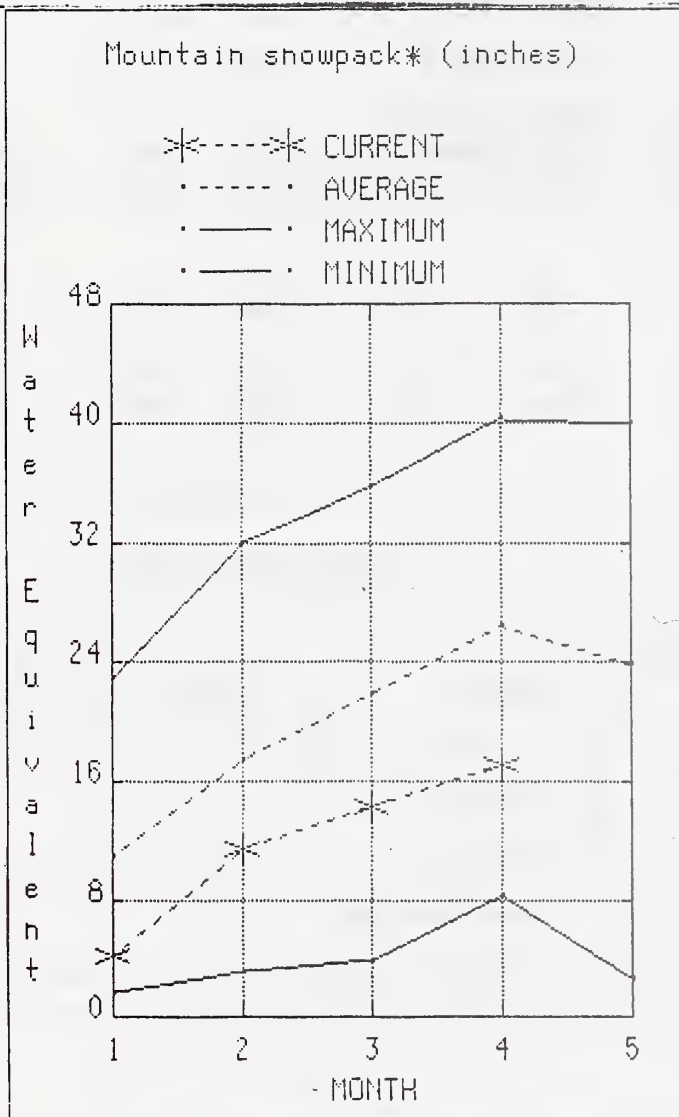
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(2) - The value is natural flow - actual flow may be affected by upstream water management.

Salmon River Basin

APRIL 1, 1990



WATER SUPPLY OUTLOOK

The central Idaho mountains received only about 60% of normal precipitation during March. The basin snowpack is now 69% of normal, down slightly from last month. Warm weather at the end of March and early April has started the snowmelt process a few weeks early, with even high elevation SNOTEL sites showing melt. With the early melt and low streamflow forecasts, water users can expect earlier as well as reduced peak flows and an earlier return to low flow conditions. Volume forecasts for the Apr-Sep period are 58% of average at Salmon and 64% at Whitebird. Irrigators on smaller tributary streams could experience shortages this season and should plan their water use carefully. Whitewater enthusiasts can expect earlier access to their favorite streams and earlier peak flows unless a significant cold spell during April slows the snowmelt cycle.

SALMON RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	<----- DRIER ----- FUTURE CONDITIONS ----- WETTER ----->								
		----- CHANCE OF EXCEEDING * -----								
		90%	70%	50% (MOST PROBABLE)		30%	10%	25 YR.		
		(1000AF)	(1000AF)	(1000AF)	(% AVG.)	(1000AF)	(1000AF)		(1000AF)	

SALMON at Salmon (1)	APR-SEP	260	480		625	58		770	990	1077
	APR-JUL	220	410		535	58		660	845	919
SALMON at White Bird (1)	APR-SEP	2540	3860		4480	64		5100	6030	7007
	APR-JUL	2660	3480		4040	64		4600	5440	6322

RESERVOIR STORAGE		(1000AF)	WATERSHED SNOWPACK ANALYSIS			
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **	WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF	
	THIS YEAR	LAST YEAR			LAST YR. AVERAGE	
		AVG.				
			Salmon River ab Salmon	14	68	65
			Lemhi River	12	85	77
			Salmon River Total	37	72	69

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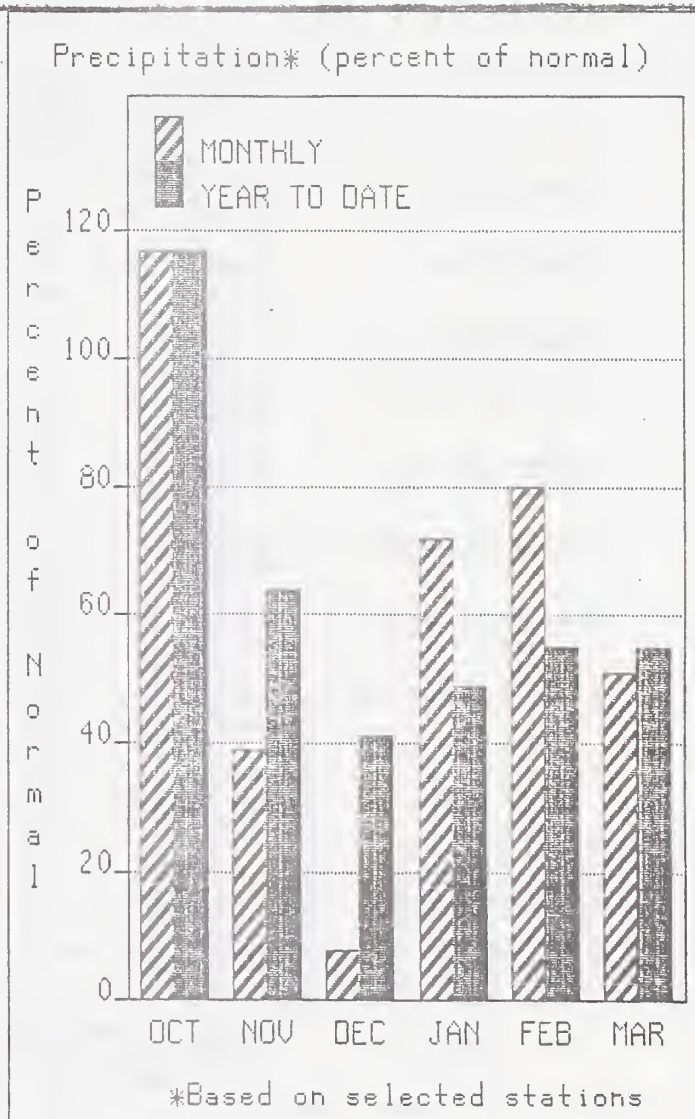
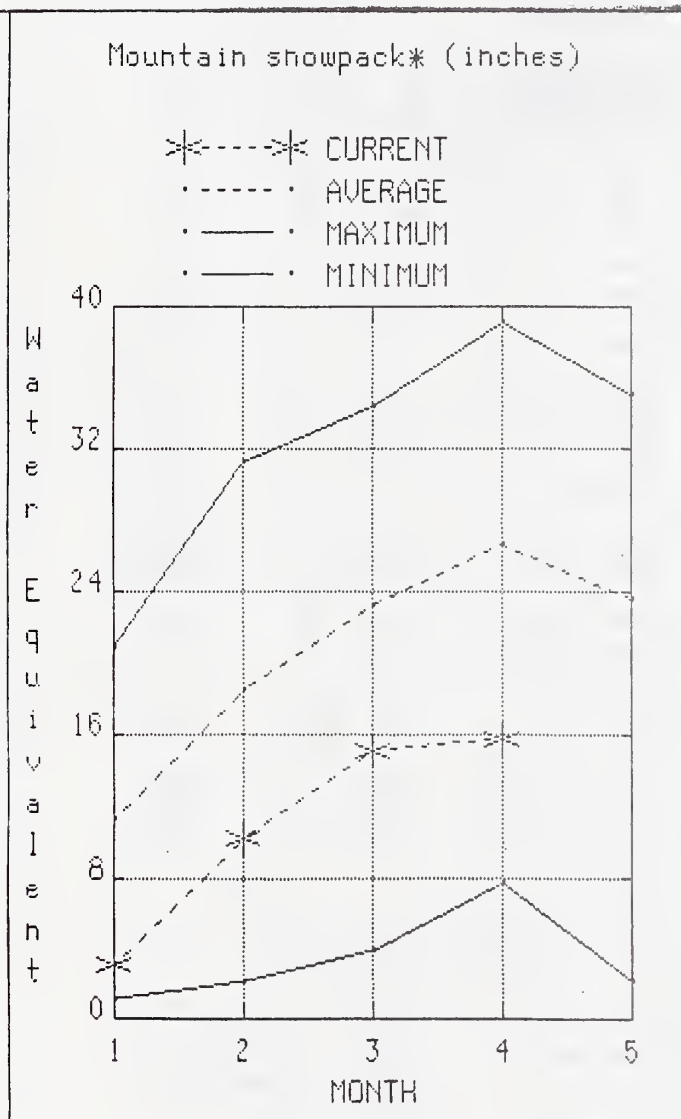
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Weiser, Payette, and Boise River Basin

APRIL 1, 1990



WATER SUPPLY OUTLOOK

Below normal precipitation during March, coupled with snowmelt in late March and early April has reduced the snowpack in the west-central mountains from the figures reported a month ago. As of April 1, snowpacks in the area are only 50-60 percent of normal. Streamflow forecasts have dropped accordingly, and range from 45 to 63% of normal. Reservoir storage is near normal in the Payette basin, and below normal in the Boise. The three major reservoirs on the Boise system report a combined storage of 54% of capacity. The Boise Project Board of Control has announced a 1.5 acre-foot per acre allotment (only 40% of average), but forecasted inflows to the system could improve this figure during the runoff season.

WEISER, PAYETTE, AND BOISE RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	CHANCE OF EXCEEDING #							
		DRIER		FUTURE CONDITIONS		WETTER			
		90%	70%	50% (MOST PROBABLE)		30%	10%	25 YR.	
		(1000AF)	(1000AF)	(1000AF) (% AVG.)		(1000AF)	(1000AF)	(1000AF)	
WEISER nr Weiser (1)	APR-SEP	27	140	215	48	290	405	444	
	APR-JUL	25	130	200	48	270	375	414	
SF PAYETTE at Lowman	APR-SEP	235	290	325	63	360	415	516	
	APR-JUL	205	250	285	62	320	365	458	
DEADWOOD RESERVOIR inflow (1)	APR-JUL	61	76	86	60	96	112	143	
NF PAYETTE at Cascade (1,2)	APR-SEP	182	250	300	53	350	415	568	
	APR-JUL	170	235	280	53	325	390	531	
NF PAYETTE nr Banks (2)	APR-SEP	260	345	400	54	455	540	737	
	APR-JUL	240	315	370	54	425	500	691	
PAYETTE nr Horseshoe Bend (1,2)	APR-SEP	725	960	1110	60	1260	1470	1562	
	APR-JUL	670	880	1020	59	1160	1360	1717	
BOISE nr Twin Springs (1)	APR-SEP	295	380	420	58	460	545	722	
	APR-JUL	270	350	385	58	420	500	664	
SF BOISE at Anderson Ranch Dam (1,2)	APR-SEP	172	250	285	46	320	400	619	
	APR-JUL	154	225	260	45	295	365	578	
BOISE nr Boise (1,2)	APR-SEP	540	760	860	53	960	1180	1628	
	APR-JUL	495	695	790	52	885	1090	1508	
	APR-JUN	430	615	695	52	775	960	1334	

RESERVOIR STORAGE					(1000AF)	WATERSHED SNOWPACK ANALYSIS			
RESERVOIR	USEABLE	** USEABLE STORAGE **				WATERSHED	NO.	THIS YEAR AS X OF	
	CAPACITY	THIS	LAST		COURSES		-----		
		YEAR	YEAR	AVG.	AVG'D		LAST YR.	AVERAGE	
MANN CREEK	11.3	8.8	9.7	8.7	Mann Creek	4	46	59	
CASCADE	703.2	497.5	452.1	377.6	Weiser River	8	58	63	
DEADWOOD	162.0	95.4	67.4	90.8	North Fork Payette	9	61	59	
ANDERSON RANCH	464.2	269.1	150.5	278.1	South Fork Payette	7	60	61	
ARROWROCK	286.6	173.0	199.2	227.8	Payette River Total	16	61	60	
LUCKY PEAK	307.0	137.4	157.8	153.2	Middle & North Fork Boise	7	63	64	
LAKE LOWELL (DEER FLAT)	177.0	115.0	137.1	152.9	South Fork Boise River	9	49	53	
					Boise River Total	18	51	57	
					Canyon Creek	2	5	8	

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table.

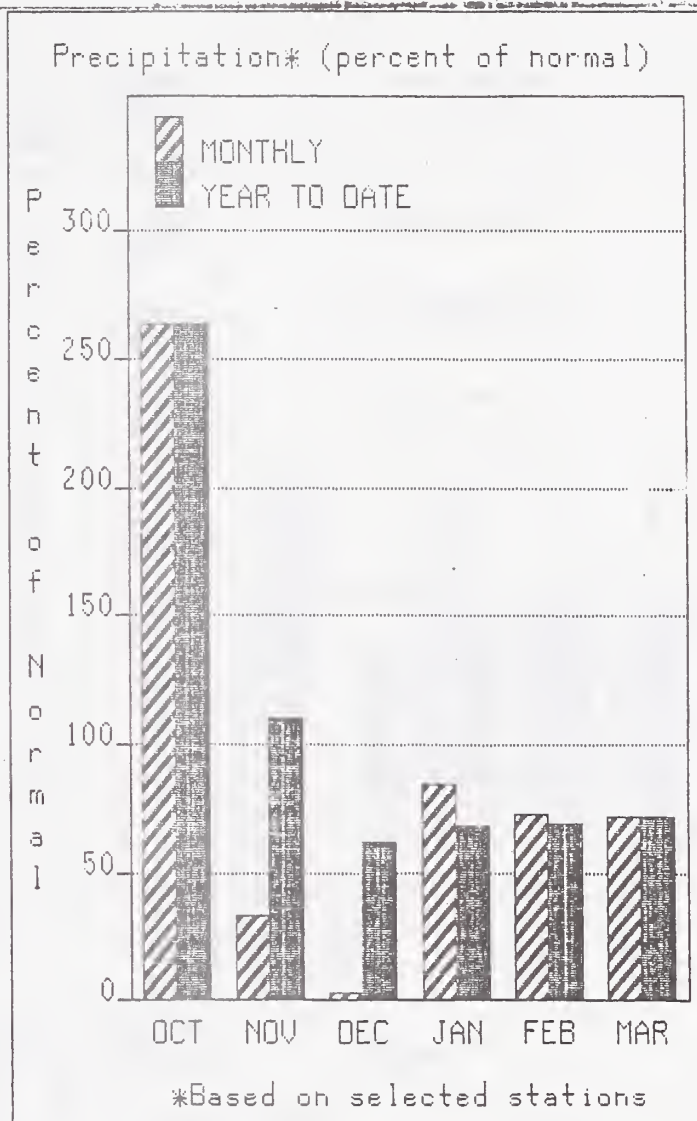
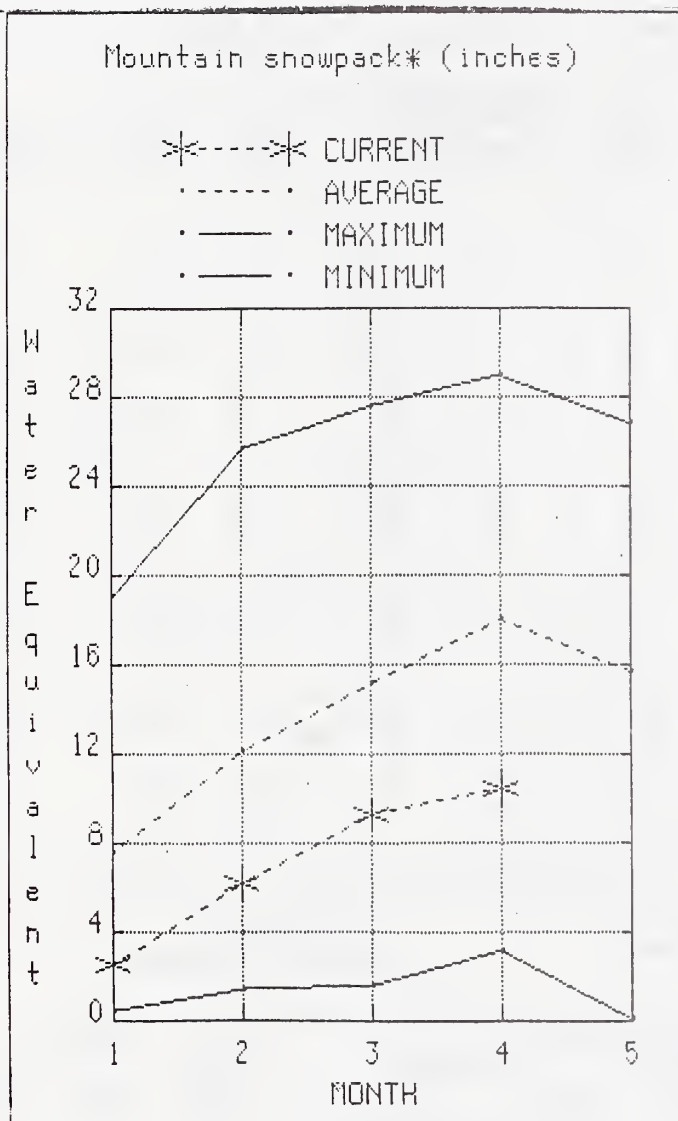
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Big Wood, Little Wood, Big Lost, and Little Lost River Basin

APRIL 1, 1990



WATER SUPPLY OUTLOOK

Irrigators in the Wood and Lost River basins are facing a critical situation with low snowpack, low reservoir storage, low soil moisture, and low streamflow forecasts. Dry and warm conditions in March have reduced snowpacks in the area to well below normal conditions. Camas Creek reports only 28% of average snowpack for April 1. Magic Reservoir reports a storage of only 27% of capacity. With well below normal streamflows forecast for the area, water users should prepare for critical water shortages this summer.

BIG WOOD, LITTLE WOOD, BIG LOST, AND LITTLE LOST RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	FUTURE CONDITIONS							25 YR. (1000AF)
		<----- DRIER -----		----- WETTER ----->					
		90% (1000AF)	70% (1000AF)	CHANCE OF EXCEEDING * (1000AF) (% AVG.)		30% (1000AF)	10% (1000AF)		
BIG WOOD nr Bellevue	APR-SEP	23	55	76	35	97	129	214	
	APR-JUL	19.0	49	69	34	89	119	198	
MAGIC RESERVOIR inflow	APR-SEP	17.0	42	96	28	150	230	338	
	APR-JUL	16.0	38	90	28	142	220	322	
LITTLE WOOD nr Carey	APR-SEP	10.0	22	31	29	40	52	107	
	APR-JUL	9.0	20	28	28	36	47	99	
BIG LOST at Howell Ranch nr Chilly	APR-SEP	70	94	110	50	126	150	219	
	APR-JUL	60	82	96	50	110	132	192	
	APR-JUN	51	66	77	52	88	103	148	
BIG LOST bl Mackay Reservoir (2)	APR-SEP	57	77	91	47	105	125	195	
	APR-JUL	43	62	75	46	88	107	162	
LITTLE LOST bl Wet Ck	APR-SEP	12.0	18.0	22	55	26	32	40	
	APR-JUL	11.0	15.0	18.0	56	21	25	32	
LITTLE LOST nr Howe	APR-SEP	18.0	22	25	57	28	32	44	
	APR-JUL	14.0	17.0	19.0	58	21	24	33	

RESERVOIR STORAGE (1000AF)					WATERSHED SNOWPACK ANALYSIS			
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **			WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF	
		THIS YEAR	LAST YEAR	AVG.			LAST YR.	AVERAGE
MAGIC	191.5	51.7	41.7	117.4	Big Wood ab Magic	10	61	61
LITTLE WOOD	30.0	22.6	18.2	18.4	Camas Creek	5	23	28
CAREY VALLEY	NO REPORT				Big Wood Total	15	52	54
MACKAY	44.5	27.6	26.7	33.3	Little Wood River	3	48	44
					Fish Creek	3	34	37
					Big Lost River	10	53	54
					Little Lost River	4	66	67

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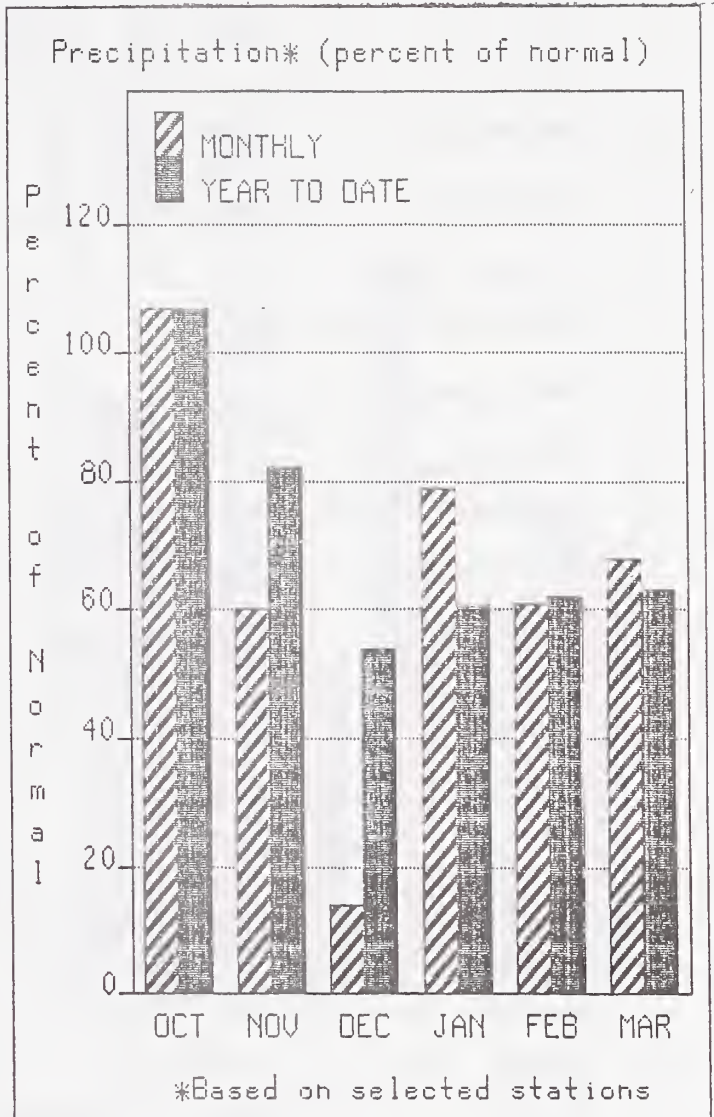
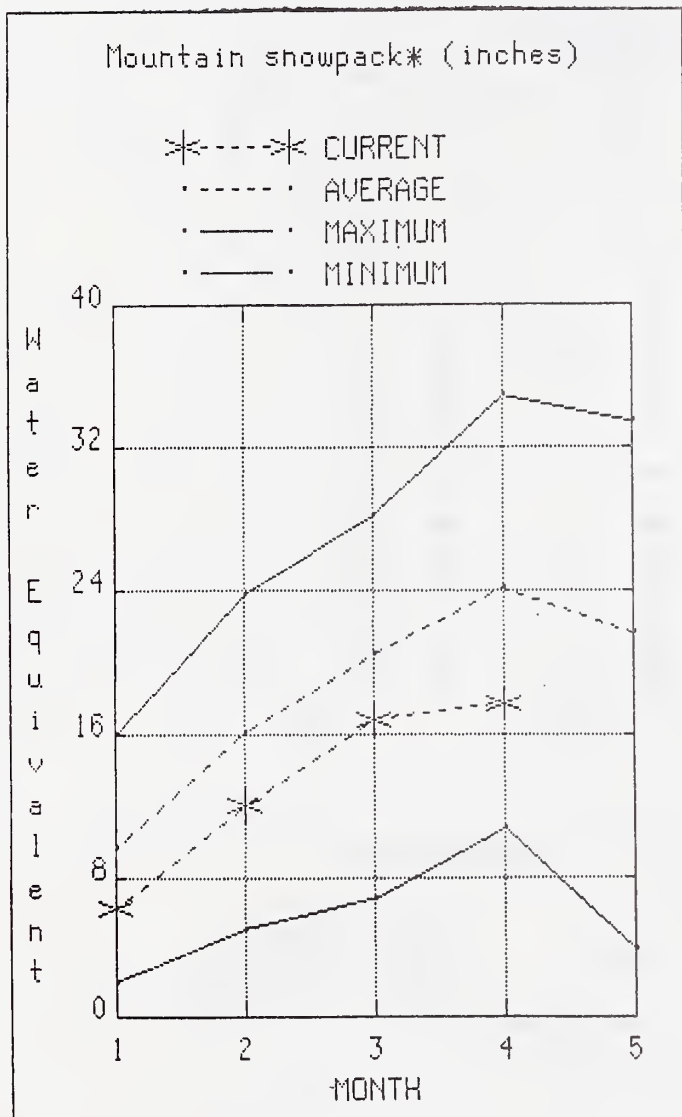
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Willow Creek, Blackfoot, Upper Snake, and Portneuf River Basin

APRIL 1, 1990



WATER SUPPLY OUTLOOK

Snowpacks in eastern Idaho have declined from the figures reported last month, and are now in the 65-75% of normal range. Water supplies look optimistic on the Snake mainstem, but may be lower on many of the tributaries. Streamflow forecasts currently range from 53% of normal on the Portneuf to 80% on the Snake near Moran. Early snowmelt and warm temperatures in late March and early April should produce earlier than normal peak flows and recession to low flow conditions. Water users should keep in touch with their local irrigation districts for more specific information.

WILLOW CREEK, BLACKFOOT, UPPER SNAKE, AND PORTNEUF RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	FUTURE CONDITIONS							
		<----- DRIER ----->				>----- WETTER ----->			
		CHANCE OF EXCEEDING #							
		90% (1000AF)	70% (1000AF)	50% (MOST PROBABLE) (1000AF)	1% AVG.)	30% (1000AF)	10% (1000AF)	25 YR. (1000AF)	
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HENRYS FORK nr Ashton (2)	APR-SEP	445	485	510	68	535	575	746	
	APR-JUL	335	360	380	68	400	425	557	
HENRYS FORK nr Rexburg (2)	APR-SEP	725	880	980	61	1080	1230	1575	
	APR-JUL	550	670	750	60	630	950	1260	
FALLS nr Squirrel (1,2)	APR-JUL	205	240	265	71	270	325	373	
TETON ab S Leigh Ck nr Driggs	APR-SEP	110	125	135	70	145	160	194	
	APR-JUL	80	91	99	68	107	118	145	
TETON nr St. Anthony	APR-SEP	265	295	320	67	345	375	479	
	APR-JUL	215	240	260	67	280	305	387	
SNAKE nr Moran (1,2)	APR-SEP	570	665	710	80	755	850	888	
PALISADES RESERVOIR inflow (1,2)	APR-SEP	2280	2700	2890	75	3080	3500	3852	
SNAKE nr Heise (2)	APR-SEP	2300	2780	3100	75	3420	3900	4142	
	APR-JUL	1920	2320	2600	74	2880	3280	3524	
SNAKE nr Blackfoot (1,2)	APR-SEP	3120	3650	4030	71	4410	5000	5680	
	APR-JUL	2520	2970	3270	71	3570	4040	4589	
PORTNEUF at Topaz	APR-JUL	25	34	40	53	46	56	75	
	APR-SEP	31	43	50	52	58	69	96	

RESERVOIR STORAGE (1000AF)					WATERSHED SNOWPACK ANALYSIS			
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **			WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF	
		THIS YEAR	LAST YEAR	AVG.			LAST YR.	AVERAGE
ISLAND PARK	127.6	126.2	90.0	119.3	Canas-Beaver Creeks	6	53	58
GRASSY LAKE	15.2	12.9	9.5	11.2	Henrys Fork River	13	63	75
JACKSON LAKE	824.7	579.8	143.9	525.9	Teton River	9	59	68
PALISADES	1357.0	1142.1	699.8	968.2	Snake above Palisades	31	69	74
AMERICAN FALLS	1700.0	1527.3	1418.8	1452.5	Snake above Jackson Lake	10	65	75
BROWNLEE	975.3	636.3	645.8	449.1	Gros Ventre River	3	77	87
BLACKFOOT	348.7	169.7	167.8	260.7	Greys River	5	71	69
HENRYS LAKE	90.4	88.1	69.8	80.1	Salt River	6	78	66
RIRIE	96.5	53.8	48.3	53.1	Willow Creek	9	50	59
					Blackfoot River	9	66	64
					Portneuf River	12	56	55
					Tcponce Creek	3	50	50

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table.

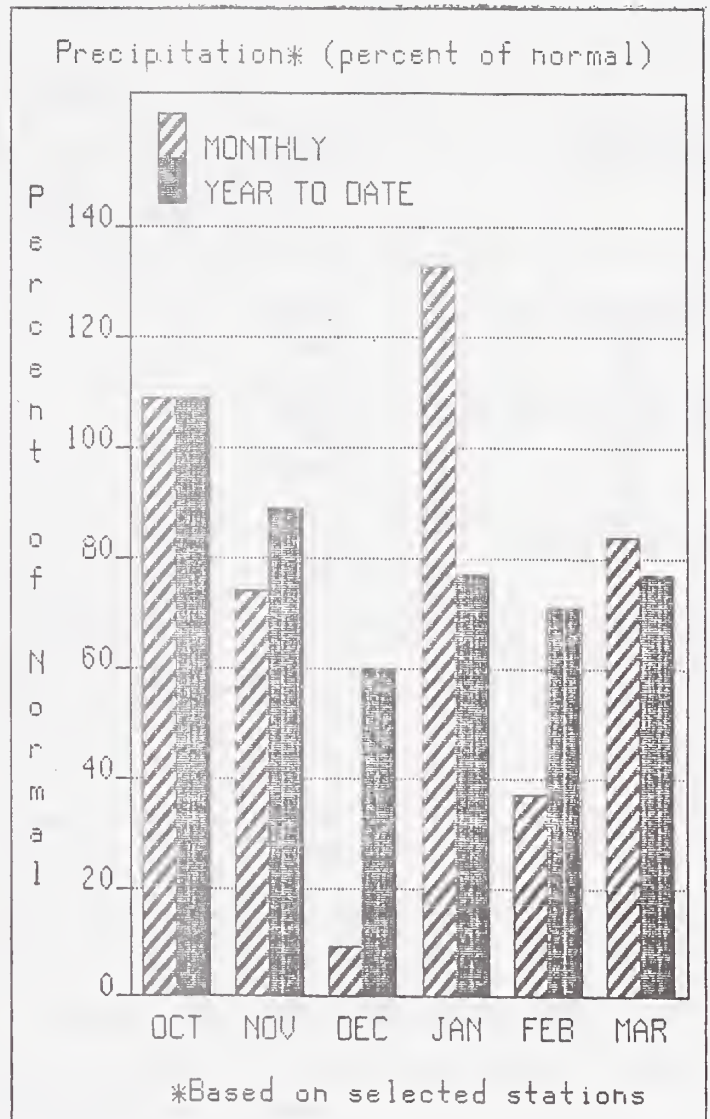
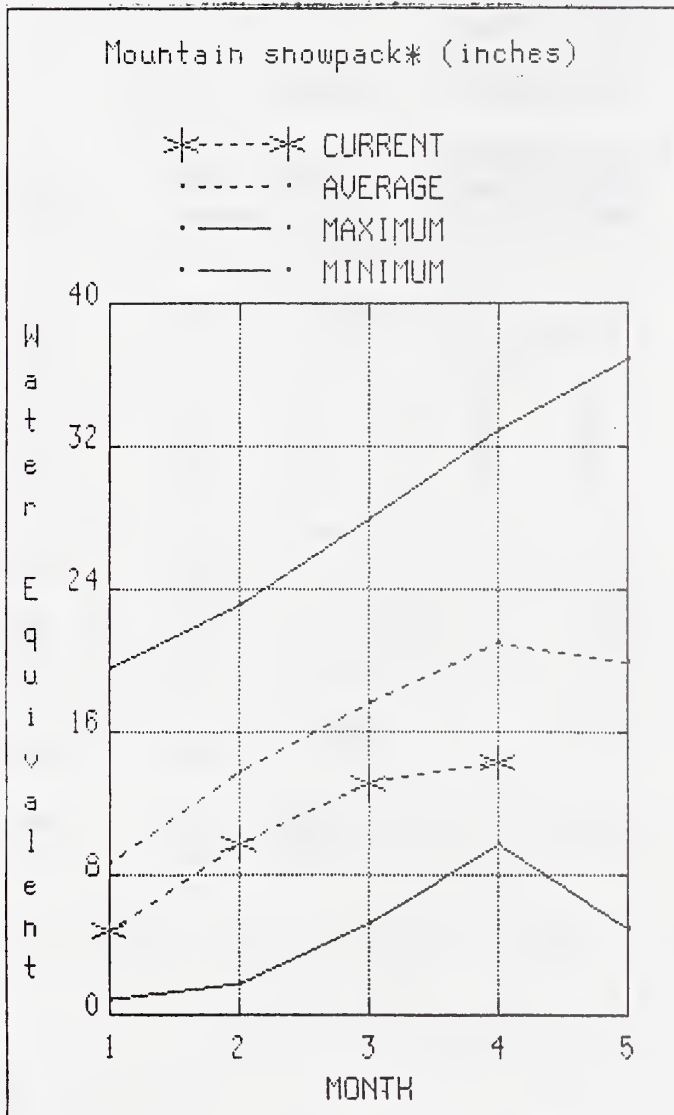
The average is computed for the 1961-1985 base period.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.

(2) - The value is natural flow - actual flow may be affected by upstream water management.

Southside Snake River Basin

APRIL 1, 1990



WATER SUPPLY OUTLOOK

Warm weather and low precipitation have combined to reduce snowpack conditions significantly in the basins of southern Idaho. Snowpacks currently range from 41% of normal on the Owyhee to 70% on the Bruneau. Warm temperatures during March have melted much of the snowpack in the Owyhee basin. The dry soils absorbed much of the snowmelt due to the slow melt rates, and very little runoff was generated. Storage remains good in Owyhee reservoir however, which is at 78% of capacity. The situation is not so good in Salmon Falls reservoir, where irrigators are facing their lowest allotment in the last 22 years. Oakley reservoir is in a similar situation, with only 23% of normal storage. Water users on the south side of the Snake should plan their operations carefully this season, and stay in touch with their local irrigation districts for more information.

SOUTHSIDE SNAKE RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	FUTURE CONDITIONS								25 YR. (1000AF)
		<----- DRIER ----->		----- WETTER ----->						
		CHANCE OF EXCEEDING *								
		90% (1000AF)	70% (1000AF)	50% (MOST PROBABLE) (1000AF)	% AVG.)	30% (1000AF)	10% (1000AF)			
DAKLEY RESERVOIR inflow	APR-SEP	3.0	8.0	13.0	40	18.0	26	33		
	APR-JUL	2.0	7.0	12.0	40	17.0	24	30		
SALMON FALLS CK nr San Jacinto	APR-SEP	8.0	29	43	47	57	78	90		
	APR-JUL	7.0	26	40	47	54	74	86		
	APR-JUN	8.0	26	38	48	50	68	80		
BRUNEAU nr Hot Spring	APR-SEP	54	93	120	51	147	187	237		
	APR-JUL	52	90	115	51	140	178	224		
OWYHEE nr Gold Ck (2)	APR-JUL	3.0	10.0	15.0	54	20	27	28		
OWYHEE nr Owyhee (2)	APR-JUL	12.0	32	46	53	60	80	86		
OWYHEE nr Rome (2)	APR-JUL	19.0	96	163	44	230	330	371		
OWYHEE RESERVOIR inflow (1,2)	APR-SEP	21	144	200	44	255	380	455		
	APR-JUL	19.0	134	187	44	240	355	427		

RESERVOIR STORAGE

(1000AF)

WATERSHED SNOWPACK ANALYSIS

RESERVOIR	USEABLE	** USEABLE STORAGE **			WATERSHED	NO.	THIS YEAR AS % OF	
	CAPACITY	THIS	LAST	AVG.		COURSES	-----	
		YEAR	YEAR			AVG'D	LAST YR.	AVERAGE
OAKLEY	77.4	17.5	18.4	34.0	Raft River	9	58	59
SALMON FALLS	182.6	36.9	40.0	62.3	Goose-Trapper Creeks	6	53	55
OWYHEE	715.0	555.8	612.6	579.0	Salmon Falls Creek	11	62	66
					Bruneau River	9	61	70
					Owyhee River	23	31	41

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table.

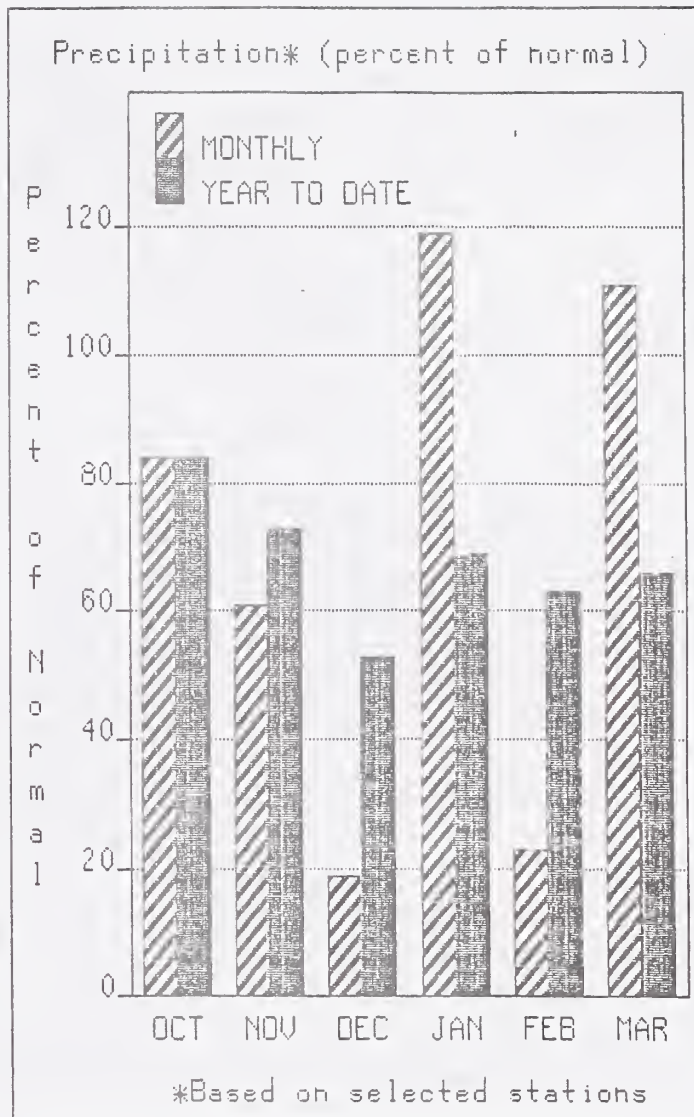
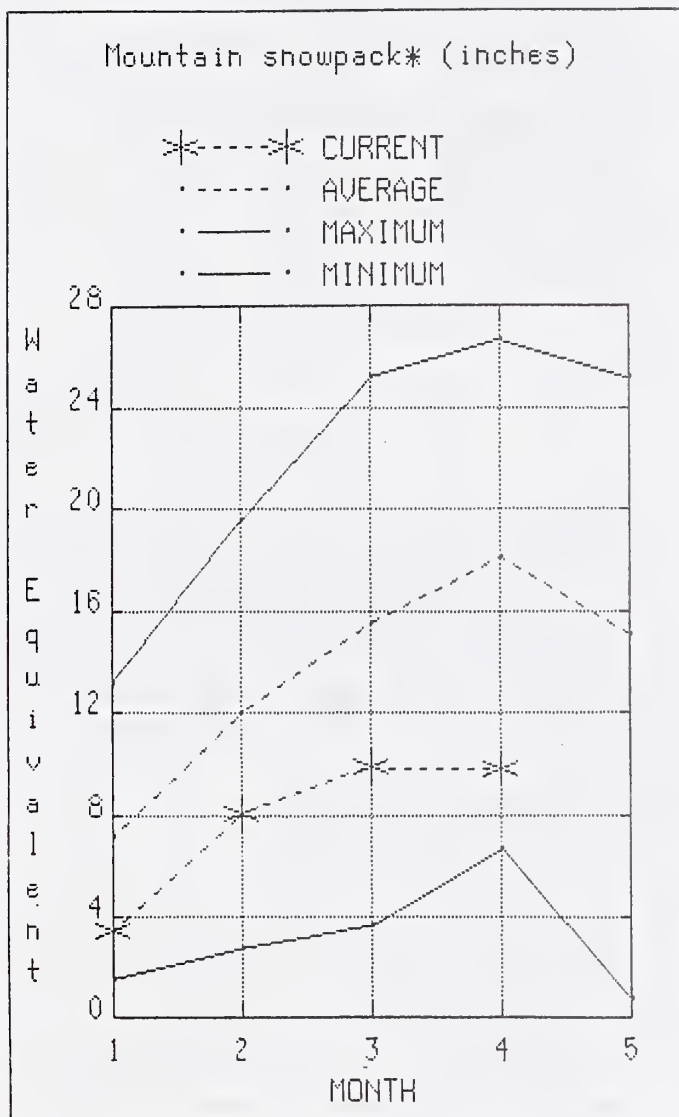
The average is computed for the 1961-1985 base period.

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Great Basin

APRIL 1, 1990



WATER SUPPLY OUTLOOK

Southeastern Idaho received several inches of much needed rainfall in the valleys during March, but warm temperatures offset any increases in the mountain snowpack. Snowpacks have decreased considerably since March 1 and now range from 27% of normal on the Malad River to 68% on the Bear. Reservoir storage continues to be below normal, with Bear Lake reporting 53% of capacity, and Montpelier Creek reservoir only 15% full. Irrigators should be prepared for possibly serious water shortages this summer and should keep in touch with their local irrigation districts for more specific information.

GREAT BASIN

STREAMFLOW FORECASTS

FORECAST POINT	<div> <div><----- DRIER -----</div> <div>FUTURE CONDITIONS</div> <div>----- WETTER -----></div> </div>								
	FORECAST	CHANCE OF EXCEEDING *							
	PERIOD	90%	70%	50% (MOST PROBABLE)		30%	10%	25 YR.	
		(1000AF)	(1000AF)	(1000AF) (% AVG.)		(1000AF)	(1000AF)	(1000AF)	
BEAR nr Harer	APR-SEP	31	83	150	48	215	315	310	
MONTPELIER CK nr Montpelier	APR-SEP	1.4	3.7	6.5	47	9.3	13.4	13.9	
CUB nr Preston	APR-SEP			26	50			52	
	APR-JUL	11.0	19.0	24	51	30	38	47	

RESERVOIR STORAGE (1000AF)					WATERSHED SNOWPACK ANALYSIS			
RESERVOIR	USEABLE	** USEABLE STORAGE **			WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF	
	CAPACITY	THIS	LAST				-----	
		YEAR	YEAR	AVG.			LAST YR.	AVERAGE
BEAR LAKE	1421.0	746.6	869.0	1002.1	Bear River (above Harer)	12	76	68
MONTPELIER CREEK	4.0	0.6	0.8	1.6	Montpelier Creek	6	58	54
					Mink Creek	6	51	49
					Cub River	4	40	39
					Malad River	7	32	27

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table.

The average is computed for the 1961-1985 base period.

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(2) - The value is natural flow - actual flow may be affected by upstream water management.

Basin Outlook Reports

and Federal - State - Private Cooperative Snow Surveys

For more water supply and resource management information, contact:

**USDA, Soil Conservation Service
Snow Survey Data Collection Office
3244 Elder Street, Room 124
Boise, Idaho 83705
(208) 334-1614 FTS 554-1614**

How forecasts are made

Most of the annual streamflow in the Western United States originates as snowfall that has accumulated high in the mountains during winter and early spring. As the snowpack accumulates, hydrologists estimate the runoff that will occur when it melts. Predictions are based on careful measurements of snow water equivalent at selected index points. Precipitation, temperature, soil moisture and antecedent streamflow data are combined with snowpack data to prepare runoff forecasts. Streamflow forecasts are coordinated by Soil Conservation Service and National Weather Service hydrologists. This report presents a comprehensive picture of water supply conditions for areas dependent upon surface runoff. It includes selected streamflow forecasts, summarized snowpack and precipitation data, reservoir storage data, and narratives describing current conditions.

Snowpack data are obtained by using a combination of manual and automated SNOTEL measurement methods. Manual readings of snow depth and water equivalent are taken at locations called snow courses on a monthly or semi-monthly schedule during the winter. In addition, snow water equivalent, precipitation and temperature are monitored on a daily basis and transmitted via meteor burst telemetry to central data collection facilities. Both monthly and daily data are used to project snowmelt runoff.

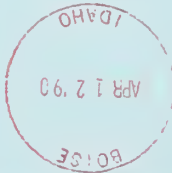
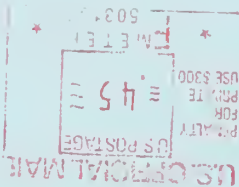
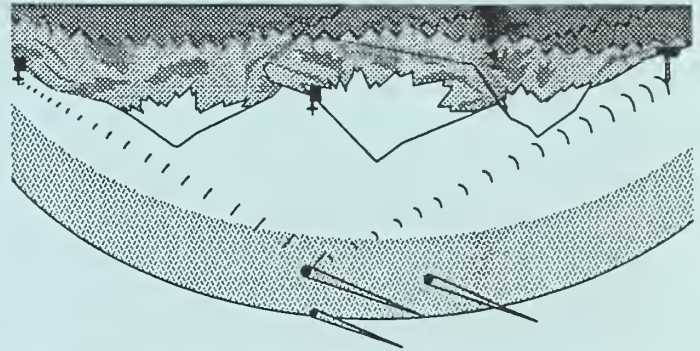
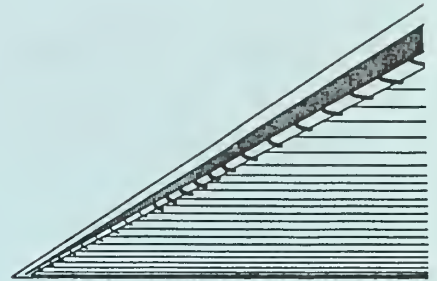
Forecast uncertainty originates from two sources: (1) uncertainty of future hydrologic and climatic conditions, and (2) error in the forecasting procedure. To express the uncertainty in the most probable forecast, four additional forecasts are provided. The actual streamflow can be expected to exceed the most probable forecast 50% of the time. Similarly, the actual streamflow volume can be expected to exceed the 90% forecast volume 90% of the time. The same is true for the 70%, 30%, and 10% forecasts. Generally, the 90% and 70% forecasts reflect drier than normal hydrologic and climatic conditions; the 30% and 10% forecasts reflect wetter than normal conditions. As the forecast season progresses, a greater portion of the future hydrologic and climatic uncertainty will become known and the additional forecasts will move closer to the most probable forecast.

Basin Outlook Reports

United States
Department of
Agriculture
Soil
Conservation
Service



3244 Elder Street
Room 124
Boise, ID 83705



In addition to basin outlook reports, a Water Supply Forecast for the Western United States is published by the Soil Conservation Service and National Weather Service monthly, January through May. Reports may be obtained from the Soil Conservation Service, West National Technical Center, 511 Northwest Broadway, Room 248, Portland, OR 97209-3489.

Issued by

Wilson Scaling
Chief
Soil Conservation Service
U.S. Department of Agriculture

Released by

Paul H. Calverley
State Conservationist
Soil Conservation Service
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